

Organizational structure of GFRA

Membership

Any organization interested in enabling the GFRA vision and mission is encouraged to join the alliance. There are three membership options:

1. *GFRA member*. FMD research organization that has signed the GFRA MoU
2. *GFRA collaborator*. Organization that collaborates on a research project with a GFRA member
3. *GFRA associate*. Organization that benefits from, shares or supports the GFRA mission

The **current members** of GFRA are:

- Australian Animal Health Laboratory, Commonwealth Scientific and Industrial Research Organisation, Australia
- Pirbright Laboratory, Institute of Animal Health, UK
- Plum Island Animal Disease Center, United States Department of Agriculture, USA
- National Centre for Foreign Animal Disease, Canadian Food Inspection Agency, Canada
- National Veterinary Institute of the Technical University of Denmark, Kalvehave, Denmark

Examples of **current collaborators** are:

- Instituto Nacional de Tecnologia Agropecuaria, Argentina (INTA)
- Regional Reference Laboratory for Foot-and-Mouth Disease in South-East Asia, Thailand

An Executive Committee comprising GFRA members facilitates activities that advance the GFRA mission. The chair rotates yearly among member institutions.

Want to know more?

For more information, contact:

Dr. Cyril G. Gay

Chair, GFRA Executive Committee

National Program Leader, Agricultural Research Service - USDA

Email: ARS-GFRA@ars.usda.gov

GFRA in a nutshell

Why?

Foot-and-mouth disease (FMD) is highly infectious and remains a threat to livestock economies worldwide. Through the efforts of research centers, we've learned a lot about this complex disease – now is the time to accelerate progress by working more closely together.

Who?

Launched in 2003, GFRA is a worldwide association of animal health research organizations that are involved in combating FMD. Its aim is to build a global alliance of partners to generate and share knowledge – in a virtual FMD laboratory – to develop tools that can better combat the threat of the disease.

How?

GFRA will facilitate the mission of the alliance by supporting strategic objectives that will advance the progressive control and eradication of FMD (see inside brochure).

What next?

The recently agreed GFRA action plan aims to:

1. Identify partnership opportunities and promote funding of collaborative research projects
2. Expand and coordinate the alliance and organize further meetings
3. Bring together experts to analyze gaps and set research priorities
4. Seek funding for further activities
5. Develop a website and other outreach materials

GFRA will continue to build the alliance by adding new members and reaching out to partners and stakeholders worldwide. It will hold at least one general meeting annually and will hold regular scientific meetings to advance its goals and objectives.

Global Foot-and-Mouth Disease Research Alliance (GFRA)



Global Foot-and-Mouth Disease
Research Alliance

Fighting foot-and-mouth
disease together

WWW.ARS.USDA.GOV/GFRA

Foot-and-mouth disease (FMD)

What do we know?

- FMD is one of the oldest and most diverse viruses known, with 7 serotypes and over 60 subtypes
- It affects cloven-hoofed animals – cattle, sheep, goats, pigs, deer, and other cloven-hoofed wildlife – and is extremely infectious
- In some parts of the world it is endemic, in others it has been eradicated

What don't we know?

- Pathogenesis and transmission of the disease between animals, and what determines susceptibility
- Mechanisms for infection and protection
- The factors driving viral evolution and geographical distribution of the disease

What are the consequences of FMD?

- It is a major cause of poverty in countries highly dependent on livestock
- It creates a barrier to international trade in livestock products
- It remains a high threat to animal agriculture in FMD-free countries

What are we doing now?

- Some major laboratories have advanced research and development programs
- Their work has led to significant progress in vaccine development and diagnostics
- Outbreaks of the disease in FMD-free countries are stringently contained, including by mass animal destruction

What can we do better in the future?

- Accelerate development of effective vaccine and biological countermeasures through improved international collaboration and coordination
- Create an integrated package of knowledge, tools and products, with guidance on their proper use
- Harmonize approaches while recognizing the different needs of FMD-free and endemic countries



Global Foot-and-Mouth Disease Research Alliance (GFRA)

Background to the alliance

While 130 years of impressive research by dedicated institutions has amassed a body of knowledge on FMD and enabled eradication of the disease from some areas of the developed world, major gaps remain in our understanding of FMD and how to combat it.

The problems are too great to tackle alone.

GFRA, therefore, aims to build a consortium of institutions conducting research into FMD to provide the scientific evidence and tools needed to control FMD in both FMD-free and FMD-endemic countries.

Only by maximizing the available resources and expertise, through international collaboration, can FMD be tackled effectively in the future.

History

2003. GFRA is launched with five founder members: Institute of Animal Health Laboratory (UK); Plum Island Animal Disease Center (USA); Australian Animal Health Laboratory; National Center for Foreign Animal Disease (Canada); and International Livestock Research Institute (Kenya).

2004. Inaugural GFRA meeting is held at U.S. Department of Agriculture, Washington, D.C.

June 2005. Business plan developed and circulated among members. A five-year research program aims to develop a new generation of vaccines and other technologies to combat FMD.

May 2008. A group of international animal health scientists meet at Plum Island to define the purpose and strategic goals of GFRA.

Vision of GFRA

A coordinated global alliance of scientists producing evidence and innovation that enables the progressive control and eradication of FMD.

Mission of GFRA

To establish and sustain global research partnerships to generate scientific knowledge and discover the tools to successfully prevent, control and eradicate FMD.

Programs of GFRA

GFRA aims to expand FMD research collaborations worldwide and maximize the use of resources and expertise to achieve its five strategic goals (see below).

Several research programs are currently active in Europe, North America, South America, South-East Asia, and Africa. GFRA programs will continue to expand the alliance in these areas and will actively reach out to new areas of the world that have a stake in the progressive control and eradication of FMD.

Strategic goals of GFRA

Goal 1. Facilitate research collaborations and serve as a communication gateway for the global FMD research community

Goal 2. Conduct strategic research to better understand FMD

Goal 3. Development of the next generation of control measures, and strategies for their application

Goal 4. Determine social and economic impacts of the new generation of improved FMD control

Goal 5. Provide evidence to inform development of policies for safe trade of animals and animal products in FMD-endemic areas